

**Note: This is a general outline to assist in the development of the Long-term Management Plan. Objectives and tasks are provided for illustrative purposes only and are not likely to represent management requirements for any specific bank.**

**Long-term Management Plan  
For  
The \_\_\_\_\_ Mitigation Bank**

A	Purpose of Establishment.....	2
B	Purpose of this Long-term Management Plan .....	2
C	Land Manager and Responsibilities.....	2
<b>II</b>	<b>Property Description .....</b>	<b>2</b>
A	Setting and Location .....	2
B	History and Land Use .....	3
<b>III</b>	<b>Habitat and Species Descriptions .....</b>	<b>4</b>
A	Biological Resources Survey of Bank. ....	4
B	Summary of Bank Development Plan ( <i>if applicable</i> ).....	4
C	Endangered and Threatened Species .....	4
D	Rare Species and Species of Special Concern .....	4
<b>IV</b>	<b>Management and Monitoring .....</b>	<b>4</b>
A	Biological Resources .....	4
	Element A.1 Waters of the U.S., including wetlands .....	5
	Element A.2 Covered Species ( <i>if applicable</i> ).....	5
	Element A.3. Covered Habitat ( <i>if applicable</i> ).....	5
	Element A.4 Threatened/Endangered Plant Species Monitoring ( <i>if applicable</i> ).....	6
	Element A.5 Threatened/Endangered Animal Species Monitoring ( <i>if applicable</i> ) .....	6
	Element A.6 Invasive Species.....	6
	Element A.7 Vegetation Management.....	7
B	Security, Safety, and Public Involvement .....	7
	Element B.1 – Trash and trespass .....	8
	Element B.2 – Fire Hazard Reduction .....	8
C	Infrastructure and Facilities .....	8
	Element C.1 Fences and Gates.....	8
D	Reporting and Administration .....	9
	Element D.1 – Annual Report.....	9
<b>V</b>	<b>Transfer, Replacement, Amendments, and Notices.....</b>	<b>9</b>
A	Transfer .....	9
B	Replacement .....	9
C	Amendments.....	10
D	Notices .....	10
<b>VI</b>	<b>Funding and Task Prioritization .....</b>	<b>11</b>
A	Funding.....	11
B	Task Prioritization .....	12
	<b>Table 1. Bank Management and Monitoring Activities, Level of Effort, Frequency and Cost.....</b>	<b>13</b>

## **Interim Management**

### **I Introduction**

#### **A Purpose of Establishment**

The \_\_\_\_\_ (“Bank”) was established by the Bank Enabling Instrument (“BEI”) to compensate for unavoidable impacts to, and to conserve and to protect waters of the U.S., covered species and covered habitat. The Bank property includes \_\_\_\_\_ acres of waters of the U.S. including \_\_\_\_\_ acres [of /all of which are] preserved wetlands, \_\_\_\_\_ acres of created wetlands, \_\_\_\_\_ acres of covered species for [specify threatened/endangered species], and \_\_\_\_\_ acres of covered habitat for [specify threatened/endangered species habitat]. The BEI Signatory Agencies are the \_\_\_\_\_ District of the U.S. Army Corps of Engineers, Region 9 of the U.S. Environmental Protection Agency, the \_\_\_\_\_ Office of the U.S. Fish and Wildlife Service, and the California Department of Fish and Game. These agencies comprise and are referred to jointly as the Interagency Review Team (“IRT”). Any subsequent grading, or alteration of the site’s hydrology and/or topography must be approved by the IRT and the necessary permits, such as a Section 404 permit, must be obtained if required.

#### **B Purpose of this Long-term Management Plan**

The purpose of the long-term management plan is to ensure the Bank is managed, monitored, and maintained in perpetuity. This management plan establishes objectives, priorities and tasks to monitor, manage, maintain and report on the waters of the U.S., covered species and covered habitat on the Bank. This management plan is a binding and enforceable instrument, implemented by the conservation easement covering the Bank property.

#### **C Land Manager and Responsibilities**

The initial land manager is \_\_\_\_\_. The land manager, and subsequent land managers upon transfer, shall implement the long-term management plan, managing and monitoring the bank property in perpetuity to preserve its habitat and conservation values in accordance with the Bank’s BEI, the conservation easement, and the long-term management plan. Long-term management tasks shall be funded through the Endowment Fund. The land manager shall be responsible for providing an annual report to the IRT detailing the time period covered, an itemized account of the management tasks and total amount expended.

### **II Property Description**

#### **A Setting and Location**

The Bank is located at \_\_\_\_\_ [include address and county], State of California, designated Assessor’s Parcel No. \_\_\_\_\_. The Property is shown on the general vicinity map (Figure 1) and the bank property map (Figure 2). The general vicinity map

shows the Bank location in relation to cities, towns, or major roads, and other distinguishable landmarks. The Bank property map shows the Bank property boundaries on a topographic map.

**B History and Land Use**

[Describe past and present land use including grazing practices].

The land in the general area of the Bank site is currently \_\_\_\_\_ [Describe adjacent land and local area land uses.]

**C Cultural Features – (if applicable refers to Cultural Resources Survey, Exhibit J in the BEI)**

[Describe all existing structures including roads, levees, fencing, and buildings, and their intended future use on the area. If such structures are likely to be considered "historical resources" of the state pursuant to Executive Order W-26-92 and historic resources preservation laws.

Describe any known archeological sites without providing their specific locations on the property, and include a summary of the results of any site surveys/inventories, including who conducted them. An assessment of the impacts of management should be given for such sites.]

**D. Hydrology and Topography**

Describe hydrology and topography of Bank site. Indicate whether wetlands are driven by surface flows (i.e., fluvial systems) or groundwater flows from offsite sources. Describe precipitation onto and off of the site.

**E. Soils**

Describe soils on the Bank site.

**E. Existing Easements.**

Include descriptions/locations of existing easements, their nature (buried pipeline, overhead power, ingress/egress, etc), authorized users (if known), access procedures, etc. Depict easements, rights of way, ingress, and egress routes on an attached map.

**F. Adjacent Land Uses**

Detail the baseline adjacent land uses. These land uses may change over time; however, the description of the baseline conditions will give the manager some idea of the conditions present when the management plan was first developed. Also detailing adjacent land uses will bring to light areas that may be of management concern or items that may compromise biological integrity over time.

### **III Habitat and Species Descriptions**

#### **A Biological Resources Survey of Bank.**

[The Biological Resources Survey, Exhibit H in the BEI, shall include a general description of geographic location and features, topography, soils, vegetation (assessment of native vs. exotic species), species present and potentially present, habitat requirements of each species and a quality assessment of all habitat types (i.e. life history requirements of covered species met, habitat diversity, connectivity to other habitats and protected areas), and species presence based on the results of protocol surveys. In addition, provide an inventory list, if available, of plant and animal species which are known or likely to occur on the property. An overview of native plant species present, if applicable, their habitat and management requirement should be presented here.]

#### **B Summary of Bank Development Plan (*if applicable*)**

[Describe all created and/or enhanced waters of the U.S., covered species and covered habitat. Include acreages and describe plant and animal species that occur within the waters of the U.S. Provide final map showing the location of waters of the U.S., covered species, and covered habitat.]

#### **C Endangered and Threatened Species**

[Describe all endangered and threatened species that occur or may occur on the bank site. If applicable, provide map showing their location.]

#### **D Rare Species and Species of Special Concern**

[Description of rare species and species of special concern that occur or may occur on the bank site. If applicable, provide map showing their location.]

### **IV Management and Monitoring**

The overall goal of long term management is to foster the long term viability of the Bank site's waters of the U.S., covered species and covered habitat. Routine monitoring and minor maintenance tasks are intended to assure the viability of the Bank site in perpetuity.

#### **A Biological Resources**

The approach to the long term management of the Bank site's biological resources is to conduct annual site examinations and monitoring of selected characteristics to determine stability and ongoing trends of the preserved and created waters of the U.S., including wetlands, [list covered species and covered habitats]. Annual monitoring will assess the Bank's condition, degree of erosion, invasion of exotic or deleterious (e.g., thatch producing) species, water quality, fire hazard, and/or other aspects that may warrant management actions. While it is not anticipated that major management actions will be needed, an objective of the long-term management plan is to conduct monitoring to identify any issues that arise, and using adaptive management to

determine what actions might be appropriate. Those chosen to accomplish monitoring responsibilities will have the knowledge, training, and experience to accomplish monitoring responsibilities.

Adaptive management means an approach to natural resource management which incorporates changes to management practices, including corrective actions as determined to be appropriate by the IRT in discussion with the land manager. Before considering any adaptive management changes to the long-term management plan, the IRT will consider whether such actions will help ensure that the continued viability of Bank's biological resources.

The list that follows is not meant to be exhaustive and some sites may have more elements to consider and some may have fewer.

The land manager for the Bank site shall implement the following:

#### **Element A.1 Waters of the U.S., including wetlands**

Objective: Monitor, conserve and maintain the Bank site's **waters of the U.S., including wetlands**. Limit any impacts to waters of the U.S. from vehicular travel or other adverse impacts.

Task: At least one annual walk-through survey will be conducted to qualitatively monitor the general condition of these habitats. General topographic conditions, hydrology, general vegetation cover and composition, invasive species, erosion, will be noted, evaluated and mapped during a site examination in the spring. Notes to be made will include observations of species encountered, water quality, general extent of wetlands, and any occurrences of erosion, and weed invasion.

Task: Establish reference sites for photographs and prepare a site map showing the reference sites for the Bank file. Alternatively, utilize photographic reference sites, if any, developed during interim bank management period. Reference photographs will be taken of the overall wetland mosaic at least every five years from the beginning of the long-term management, with selected reference photos taken on the ground more frequently, # times per year (*if applicable*).

#### **Element A.2 Covered Species (*if applicable*)**

Objective: Monitor, conserve and maintain the Bank site's covered species.

Task: As part of the annual site walk-through, the status and any changes to the covered species will be noted. Any necessary tasks will be identified, prioritized and implemented as funding is available.

#### **Element A.3. Covered Habitat (*if applicable*)**

Objective: Monitor, conserve and maintain the Bank site's covered habitat.

Task: As part of the annual site walk-through, the Bank site's covered habitat will be examined for any changes, current condition or pending needs. Any necessary tasks will be identified, prioritized and implemented as funding is available.

**Element A.4 Threatened/Endangered Plant Species Monitoring (if applicable)**

*[NOTE: This methodology is currently specific to Limnanthes vulcanis and may vary for other plant species as determined in consultation with the appropriate agencies]*

Objective: Monitor population status and trends.

Objective: Manage to maintain habitat for \_\_\_\_\_.

Task: Monitor status every year by conducting population assessment surveys. The annual survey dates will be selected during the appropriate blooming period and will generally occur from late March through April depending on the timing of the blooming period each year. Occupied habitat will be mapped and numbered to allow repeatable data collection over subsequent survey years. Abundance will be assessed semi-quantitatively using broad abundance categories, i.e., 0, 1 - 100, 101 - 500, 501 - 1,000, and >1,000 plants.

Task: Visually observe for changes to occupied habitat, such as changed hydrology or vegetation composition. Record any observed changes.

Task: Implement other tasks that enhance or monitor habitat characteristics for \_\_\_\_\_.

**Element A.5 Threatened/Endangered Animal Species Monitoring (if applicable)**

*[NOTE: Species-specific objectives and tasks will need to be developed in consultation with the appropriate agencies]*

Objective: Monitor population status and trends.

Objective: Manage to maintain habitat for \_\_\_\_\_.

Task: Monitor status every year by conducting population assessment surveys. The annual survey dates will be selected during the appropriate period each year.

Task: Implement other tasks that enhance or monitor habitat characteristics for \_\_\_\_\_.

**Element A.6 Invasive Species**

Objective: Monitor and maintain control over major noxious weeds and/or other strongly invasive plants or wildlife that diminish site quality.

Task: Mapping of invasive species shall occur during the first five years bank management, until a baseline is established. Mapping shall be accomplished through use of available technologies, such as GIS and aerial photography.

Task: Each year's annual walk-through survey (or a supplemental survey) will include a qualitative assessment of potential or observed weed invasions, primarily in or around the wetlands. Additional actions to control invasive species will be evaluated and prioritized.

[NOTE: Particularly aggressive species such as Harding grass (*Phalaris*), cocklebur (*Xanthium*), pampas grass (*Cortaderia*), or other dense thatch-producing species will be noted and addressed through either hand removal or highly selective approved herbicide applications. Common naturalized wetland species such as ryegrass (*Lolium*), pennyroyal (*Mentha*), umbrella sedge (*Cyperus*), rabbitfoot grass (*Polypogon*), prickly grass (*Crypsis*), knotweed (*Polygonum aviculare*), and others (e.g., *Rumex*, *Hordeum*, *Chenopodium*, *Amaranthus*) will generally be allowed to grow in small amounts, and will be addressed as needed if especially large or domineering stands are encountered and deemed to be deleterious.]

## **Element A.7 Vegetation Management**

Objective: Analyze effects of mowing and grazing on habitat quality. If determined appropriate, develop and implement specific mowing and/or grazing actions in coordination with management at other local conservation sites to maintain habitat quality.

Objective: Adaptively manage vegetation management based on site conditions and data acquired through monitoring to maintain biological values.

Task: Review and explore potential vegetation management regimes as proposals and/or opportunities and funding arise. If determined to potentially maintain site quality, develop specific grazing practices, amend this long-term management plan with the IRT's approval to reflect those practices, and implement grazing actions as funding allows.

Task: Implement vegetation management techniques, if determined beneficial and as funding allows, to maintain vegetation height and composition similar to baseline conditions or as determined likely to maintain seasonal wetland function or *threatened/endangered plant species* habitat. Implementation of vegetation management techniques must be approved by the IRT.

## **B Security, Safety, and Public Access**

The Bank will be fenced and shall have no general public access, nor any regular public or private use. Research and/or other educational programs or efforts will be allowed on the Bank site as deemed appropriate by the IRT, but are not specifically funded or a part of this long-term management plan.

Potential mosquito issues will be addressed through the development of a plan by the land manager and the mosquito and vector control district in coordination with and with the approval of the IRT agencies.

Potential wildfire fuel (dry grass) will be reduced as needed by mowing in areas where appropriate as approved by the IRT.

### **Element B.1 – Trash and trespass**

Objective: Monitor sources of trash and trespass.

Objective: Collect and remove trash, repair vandalized structures, and rectify trespass impacts.

Task: During each site visit, record occurrences of trash and/or trespass. Record type, location, and management mitigation recommendations to avoid, minimize, or rectify a trash and/or trespass impact.

Task: At least once yearly collect and remove as much trash and repair and rectify vandalism and trespass impacts.

### **Element B.2 – Fire Hazard Reduction**

Objective: Maintain site as required for fire control but limiting impacts on site biological values.

Task: Mow or graze to clear vegetation in areas required by Authority Agency (ies), and approved by the IRT, for fire control.

## **C Infrastructure and Facilities**

Fence and gate maintenance and repair frequency will be dependent on trespass and access control issues, as well as whether grazing is utilized as a vegetation management technique and to what extent.

### **Element C.1 Fences and Gates**

Objective: Monitor condition of fences and gates.

Objective: Maintain fences and gates to prevent casual trespass, allow necessary access, and *(if applicable)* facilitate grazing regime and management.



Task: During each site visit, record condition of fences and gates. Record location, type, and recommendations to implement fence and/or gate repair or replacement, if Applicable.

Task: Maintain fences and gates as necessary by replacing posts, wire, and/or gates. Replace fences and/or gates, as necessary, and when funding allows.

## **D Reporting and Administration**

### **Element D.1 – Annual Report**

Objective: Provide annual report on all management tasks conducted and general site conditions to IRT and any other appropriate parties.

Task: Prepare annual report and any other additional documentation. Include a summary. Complete and circulate to the IRT and other parties by August 15 of each year.

Task: Make recommendations with regard to (1) any habitat enhancement measures deemed to be warranted, (2) any problems that need near term attention (e.g., weed removal, fence repair, erosion control), and/or (3) any changes in the monitoring or management program that appear to be warranted based on monitoring results to date.

## **V Transfer, Replacement, Amendments, and Notices**

### **A Transfer**

Any subsequent transfer of responsibilities under this long-term management plan to a different land manager shall require approval by the IRT, in writing and shall be incorporated into this long-term management plan by amendment. Any subsequent Property Owner assumes land manager responsibilities described in this long-term management plan and as required in the Conservation Easement, unless otherwise amended in writing by the IRT.

### **B Replacement**

If the land manager fails to implement the tasks described in this long-term management plan and is notified of such failure in writing by any of the IRT, land manager shall have 90 days to cure such failure. If failure is not cured within 90 days, land manager may request a meeting with the IRT to resolve the failure. Such meeting shall occur within 30 days or a longer period if approved by the IRT. Based on the outcome of the meeting, or if no meeting is requested, the IRT may designate a replacement land manager in writing by amendment of this long-term management plan. If land manager fails to designate a replacement land manager, then such public or private land or resource management organization acceptable to and as directed by the IRT may enter onto the Bank property in order to fulfill the purposes of this long-term management plan.

## **C      Amendments**

The land manager, **property owner**, and the IRT may meet and confer from time to time, upon the request of any one of them, to revise the long-term management plan to better meet management objectives and preserve the habitat and conservation values of the Bank property. Any proposed changes to the long-term management plan shall be discussed with the IRT and the land manager. Any proposed changes will be designed with input from all parties. Amendments to the long-term management plan approved by the IRT in writing shall be required management components and shall be implemented by the land manager.

If the CDFG or USFWS determine, in writing, that continued implementation of the long-term management plan would jeopardize the continued existence of a state or federally listed species, any written amendment to this long-term management plan, determined by either the CDFG or USFWS as necessary to avoid jeopardy, shall be a required management component and shall be implemented by the land manager.

## **D      Notices**

Any notices regarding this long-term management plan shall be directed as follows:

Land Manager :( name and address)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

IRT, BEI Signatory Agencies:

U.S. Army Corps of Engineers

\_\_\_\_\_ District

[DISTRICT ADDRESS]

Attn: Chief, Regulatory Branch

Telephone:

Fax:

U.S. Fish and Wildlife Service

\_\_\_\_\_ Office

[FIELD OFFICE ADDRESS]

Attn: Field Supervisor

Telephone:

Fax:

U.S. Environmental Protection Agency

Region IX  
75 Hawthorne Street  
San Francisco, CA 94105  
Attn: Director, Water Division  
Telephone: 415-947-8707  
Fax: 415-947-3549

California Department of Fish and Game  
\_\_\_\_\_Region  
[REGION ADDRESS]  
Attn: Regional Manager  
Telephone:  
Fax:

California Department of Fish and Game  
Habitat Conservation Planning Branch  
1416 Ninth Street, 12th Floor  
Sacramento, CA 95814  
Attn: Branch Chief  
Telephone: 916-653-4875  
Fax: 916-653-2588

## **VI Funding and Task Prioritization**

### **A Funding**

Table 1 summarizes the anticipated costs of long term management for the Bank. The list of tasks in Table 1 is not meant to be exhaustive and some sites may have more elements to consider and some may have fewer depending on the attributes of the bank. These include estimates of time and funding needed to conduct the basic monitoring site visits and reporting, weed mowing, trash removal, fence repair, and a prorated calculation of funding needed to fully replace the fences every \_\_\_\_\_ years. The total annual funding anticipated is approximately \$\_\_\_\_\_, therefore, with the current annual estimated capitalization rate of (e.g., 2.2 percent), the total endowment amount required will be \$\_\_\_\_\_.

CDFG shall hold the endowment principal and interest monies as required by existing law in the Special Deposit Fund or subsequent state authorized trustee fund, which consists of monies that are paid into it in trust pursuant to law, and is appropriated to fulfill the purposes for which payments into it are made. These interest monies will fund the long-term management,

enhancement, and monitoring activities on habitat lands in a manner consistent with this long-term management plan.

*If CDFG is not the land manager insert:* Land manager shall consult with CDFG on a year to year basis to determine the amount of funding available for management and monitoring activities. Following annual management activities, land manager may invoice CDFG for management activities following the invoicing instructions provided by CDFG.

## **B Task Prioritization**

Due to unforeseen circumstances, prioritization of tasks, including tasks resulting from new requirements, may be necessary if insufficient funding is available to accomplish all tasks. The land manager and the BEI Signatory Agencies shall discuss task priorities and funding availability to determine which tasks will be implemented. In general, tasks are prioritized in this order: 1) required by a local, state, or federal agency, 2) tasks necessary to maintain or remediate habitat quality, 3) tasks that monitor resources, particularly if past monitoring has not shown downward trends. Equipment and materials necessary to implement priority tasks will also be considered priorities. Final determination of task priorities in any given year of insufficient funding will be determined by the BEI Signatory Agencies in writing.

<b>Table 1. Bank Management and Monitoring Activities, Level of Effort, Frequency and Cost.</b>							
<b>General Bank Management &amp; Monitoring Activities</b>	<b>Description</b>	<b>Level of Effort</b>	<b>Cost per Unit</b>	<b>Cost</b>	<b>Frequency</b>	<b>Schedule</b>	<b>Annual Cost</b>
<b>Element A.1 Waters of the U.S. , including wetlands</b>							
Monitor waters if the U.S.	Walking survey; notes, photos	No. of hours	\$/hour	\$	2-3 surveys per year	winter, spring	\$
Reference photography	Compile and present	No. of hours	\$/hour	\$+ 100 exps.	annual	winter, spring	\$
<b>Element A.2 Covered Species, if applicable</b>							
Monitor Covered Species	Walking survey; notes, photos	No. of hours	\$/hour	\$	once per year	any time	\$
<b>Element A.3 Covered Habitat, if applicable</b>							
Monitor Covered Habitat	Map; assess abundance/health	No. of hours	\$/hour	\$	every year	April (May)	\$
<b>Element A.4 Threatened/Endangered plant species monitoring, if applicable</b>							
	Map; assess abundance/health	No. of hours	\$/hour	\$	every year	As appropriate	\$
<b>Element A.5 Threatened/Endangered animal species monitoring, if applicable</b>							
Monitor species	Map; assess abundance/health	No. of hours	\$/hour	\$	every year	As appropriate	\$
<b>Element A.6 Invasive Species</b>							
Assess weed growth, extent	Walking survey, map; research	No. of hours	\$/hour	\$	1-2 times per year	spring, summer	\$
Weed removal	Hand labor	No. of hours	\$/hour	\$	as needed	late spring, summer	\$
<b>Element A.7 Vegetation Management</b>							
Mowing	Contract mowing	No. of hours	\$/hour	\$	once per year	early summer	\$
Grazing research and management	Research and coordination	No. of hours	\$/hour	\$	as appropriate	as needed	\$

<b>Table 1. Bank Management and Monitoring Activities, Level of Effort, Frequency and Cost, continued.</b>							
<b>General Bank Management &amp; Monitoring Activities</b>	<b>Description</b>	<b>Level of Effort</b>	<b>Cost per Unit</b>	<b>Cost</b>	<b>Frequency</b>	<b>Schedule</b>	<b>Annual Cost</b>
<b>Element B.1 Trash and Trespass</b>							
Trash and trespass monitoring	Walking surveys	No. of hours	\$/hour	\$	3 times per year	as appropriate	\$
Trash removal and cleanup	Hand labor	No. of hours	\$/hour	\$	as needed	as needed	\$
<b>Element B.2 Fire Hazard Reduction</b>							
Fire hazard assess and contracting	Survey, contract, supervise	No. of hours	\$ /hour	\$	as needed; once per year	late spring	\$
<b>Element C.1 Fences and Gates</b>							
Survey & assess fences	Walk; document conditions	No. of hours	\$/hour	\$	1-2 times per year	as needed	\$
Repair fencing	Hand labor	No. of hours	\$ /hour	\$	as needed	as needed	\$
Replace fencing	Materials and labor	number of feet	\$/ foot	\$	replace all every __ yr	ongoing	\$
Gate replacement	Materials and labor	1 gate	\$	\$	replace every __ yr	as needed	\$
<b>Element D.1 Annual Report</b>							
Annual report	Analyze & report; maps, photos	No. of hours	\$/hour	\$	once per year	due in summer	\$
Account administration		No. of hours	\$ /hour	\$	as needed	annually	\$
Vehicles and supplies				\$			\$
Totals							\$
Current annual capitalization rate							x.x%
<b>TOTAL ENDOWMENT</b>							<b>\$</b>

